

Title (en)

DISTRIBUTION OF ERROR CHECKING AND CORRECTION (ECC) BITS TO ALLOCATE ECC BITS FOR METADATA

Title (de)

VERTEILUNG VON FEHLERPRÜF- UND -KORREKTURBITS (ECC) ZUR ZUWEISUNG VON ECC-BITS FÜR METADATEN

Title (fr)

DISTRIBUTION DE BITS DE VÉRIFICATION ET DE CORRECTION D'ERREURS (ECC) POUR ATTRIBUER DES BITS ECC À DES MÉTADONNÉES

Publication

EP 4033362 A1 20220727 (EN)

Application

EP 21198643 A 20210923

Priority

US 202117156399 A 20210122

Abstract (en)

A memory subsystem includes multiple memory resources connected in parallel, including a first memory resource and a second memory resource. The memory subsystem can split a portion of data into multiple sub-portions. Split into smaller portions, the system needs fewer ECC (error checking and correction) bits to provide the same level of ECC protection. The portion of data can include N ECC bits for error correction, and the sub-portions can each include a sub-portion of (N-M) ECC bits for error correction. The system can then use M bits of data for non-ECC purposes, such as metadata.

IPC 8 full level

G06F 11/10 (2006.01)

CPC (source: CN EP US)

G06F 3/0679 (2013.01 - CN); **G06F 11/1008** (2013.01 - CN); **G06F 11/1044** (2013.01 - CN); **G06F 11/1048** (2013.01 - EP); **G06F 11/1068** (2013.01 - US); **G11C 29/42** (2013.01 - CN); **G11C 29/52** (2013.01 - CN); **H03M 13/19** (2013.01 - EP)

Citation (search report)

- [X] US 2019205225 A1 20190704 - KIM KYU-HYOUN [US], et al
- [X] US 2020133769 A1 20200430 - BAINS KULJIT S [US]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2021141692 A1 20210513; CN 114816829 A 20220729; EP 4033362 A1 20220727; JP 2022113100 A 20220803

DOCDB simple family (application)

US 202117156399 A 20210122; CN 202111569808 A 20211221; EP 21198643 A 20210923; JP 2021155345 A 20210924